



Marilyn Lieber
President and CEO
Michigan Fitness Foundation

Chairman George and Members of the Health Policy Committee

My name is Marilyn Lieber and I am President and CEO of the Michigan Fitness Foundation, a nonprofit organization dedicated to creating a physically educated population. I am pleased to be here today to talk about the importance of quality physical education in the lives of our children and to urge everyone to consider the long term impact of a physically educated society.

While we have all heard numerous reports about the impact of childhood obesity, I would like to briefly highlight three ways this health crisis impacts all of us.

1. Economic Impact

- Treating a child with obesity is three times more costly than treating the non-obese child (F as in Fat 2008)
- Between 1979-1999, obesity-associated hospital cost for children went from \$35 million to \$127 million (Wang and Dietz, 2002)
- On a national level, physical inactivity costs \$128 per person (Garrett, 2004)

2. Educational Impact

- Obese children often suffer from depression, anxiety disorders, poor self-esteem, and bullying from their peers
- Obese children miss four times as much school as children who are not obese (NASBE, 2004)
- A new study in the *Journal of School Health* (Jan 28, 2009) found that physically fit kids scored better on standardized math and English tests than their less fit peers.

3. Public Health Impact

- If overweight and obesity trends continue, this generation of children will die younger than the prior generation and it will be
- Diabetes is America's fastest growing chronic disease, and at current rates children born today have a one in three chance of developing diabetes in their lifetime.

Quality physical education provides our students with the knowledge, skill, competence and confidence to be active for life. While a goal for PE might be to keep kids moving while in the physical education classroom, it is preferable to make sure they move when they are outside that classroom. The Exemplary Physical Education Curriculum (EPEC) provides this type of quality PE program in many Michigan schools. Early studies indicate that these EPEC trained students are more active outside of school. Quality physical education should do exactly that—equip are youth to be active for life.

The decision to introduce bills that support requirements for physical education are taking us in a direction that many others support. Michigan is in good company joining fourteen states which enacted PE legislation in 2007. In 2008 Arizona, Colorado, Florida, Maryland, New Mexico, Oklahoma and Virginia enacted legislation related to physical activity and physical education and 17 other states were considering such legislation. In addition, the National

Association for Sport and Physical Education (NASPE) is a strong supporter of daily physical education in all school grades.

If there are concerns about the public's support for such legislation, the Harvard Forum on Health commissioned a study and found that 91% support more physical education in schools as a way to combat childhood obesity (76% strongly support and 15% somewhat support). In a NASPE survey of parents 95% think regular, daily physical activity helps children do better academically, 95% think physical education curriculum should be part of the school experience for all students in grades K-12 and 76% think more school physical education could help control or prevent childhood obesity.

I commend those of you who sponsored or co-sponsored SB 365 and 366 and urge this committee to move this bill forward for consideration by the full senate. Your action will move Michigan in the direction that will help assure a quality of life and economic impact we will feel for generations to come.

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A Healthy Future

Legislative support is needed to:

Strengthen requirements for K-8 Physical Education and Health Education

Benefits to supporting coordinated school health programs:

- Economic
- Public Health
- Educational

Exemplary Physical Education Curriculum

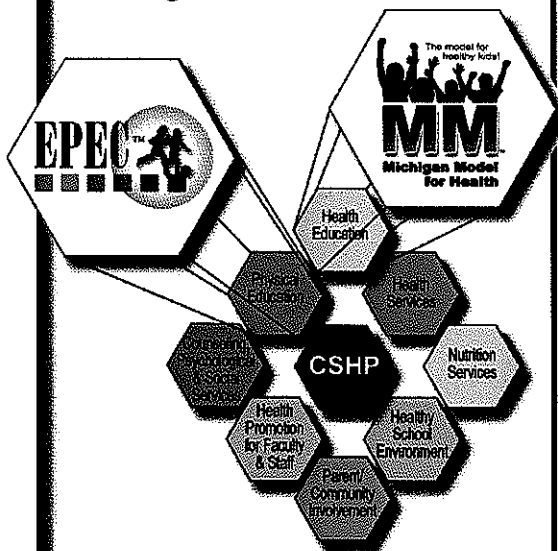


EPEC is an award winning, K-12 curriculum aligned with the Michigan Content Standards for Physical Education. It teaches students the knowledge and skills they need to be active and fosters feelings of competence and confidence necessary to enjoy physical activity for a lifetime.

Benefits

- Physically fit students perform better academically.
- Children with lower Body Mass Index (BMI) are less likely to develop chronic diseases, such as type 2 diabetes and coronary heart disease as adults.
- Students who are more skilled at various physical activities are more likely to be active outside of school.
- Physically active children are more likely to become physically active adults.

Coordinated School Health Programs (CSHP) help students adopt healthy behaviors and attitudes, saving future medical costs.



Ultimate Goal: Michigan residents with the knowledge, skills and attitudes to build lifelong health and wellness.



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Partnering for a Healthy Future

Michigan Model for Health®



Michigan Model for Health®, our state's nationally acclaimed, K-12 health curriculum, is aligned to Michigan Content Standards for Health Education. It increases students' positive health behaviors and involves families and communities in extending health learning beyond the classroom.

Benefits

- Students make better academic progress when they are healthy and feel safe at school.
- Students need information and support as they face health risks.
- Health education helps students grow up to be healthier, happier adults.
- Students acquire skills to improve their lifelong health, reducing health care costs.

We are here today representing:

Health educators

Comprehensive School Health Coordinators' Association (CSHCA)

Physical educators

Michigan Association for Health, Physical Education, Recreation and Dance (MAHPERD)
Governor's Council on Physical Fitness, Health and Sports/Michigan Fitness Foundation

Support groups

College/University Students and Professors, Administrators, Parents



Governor's Council on Physical Fitness, Health and Sports
517-347-7891
www.michiganfitness.org



MAHPERD
517-347-0485
www.mimahperd.org



Comprehensive School Health Coordinators' Association
517-541-8768
www.cshca.org

Impact of Quality Health Education

The Problem

Health care costs and loss of productivity are costly.

"Our vision for our nation's schools is to ensure high standards of performance for every one of our children and prepare each child to succeed as a productive member of a democratic society. Educators throughout the country are striving to achieve this national priority. Yet how can every child succeed when so many reach the schoolhouse door with physical and mental health challenges that impede their ability to learn and compromise their likelihood of becoming healthy, capable adults?" (Policy Statement on School Health, Council of Chief State School Officers, 2004)

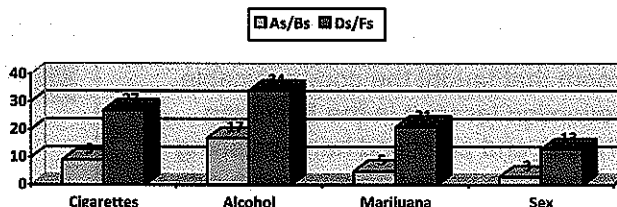
Economic Impact

- **U.S. businesses lose more than \$1 trillion a year in productivity due to chronic illness.** (Martin, J. PhD, 2008)
- **Smoking-caused productivity losses total more than \$90 billion per year in the U.S., not including losses from smokers taking more sick days than nonsmokers.** (Centers for Disease Control, 2005)
- **Tobacco use is the leading preventable cause of death in the United States, resulting in 400,000 premature deaths and costing the nation nearly \$100 billion in health care bills each year. These expenditures include \$65 billion under state and federal health care programs such as Medicaid, amounting to hidden tax of \$575 on every American household.** (University of California, San Francisco, PLoS Medicine, 2008)
- **Sixty percent of boys categorized as bullies in grades six through nine were convicted of at least one crime by the age of 24; 40 percent of boys who were bullies had three or more convictions by the age of 24.** (Fight Crimes: Invest in Kids, 2003)

Educational Impact

Students who have used alcohol, tobacco, or other drugs or had sex prior to age 13 are significantly more likely to get Ds or Fs than students who have not done so.

Grades of Students Beginning Risk Behaviors Before Age 13



Source: 2007 Michigan Youth Risk Behavior Survey, online at http://www.michigan.gov/mde/0,1607,7-140-28753_38684_29233_41316--,00.html

Asthma is the leading cause of school absenteeism; three children in an average classroom have asthma.

(Centers for Disease Control)

160,000 students miss school every day due to fear of attack or intimidation by a bully. (Grammar, K. & Viji, V., 2004)

Students with poor nutrition and low levels of physical fitness are more likely to be absent and tardy.

(Archives of Pediatric Adolescent Medicine, 1998)

Public Health Impact

- **For the first time in history, we have a whole generation that has a shorter life expectancy than their parents.** (Centers for Disease Control)
- **The average child spends nearly 45 hours a week with television, movies, magazines, music, the Internet, cell phones, and video games.** They spend only 17 hours with parents and 30 hours in school. Research has found strong connections between media exposure and childhood obesity, tobacco use, and early sexual behavior. (National Institutes of Health and Yale University, 2008)
- **Only 17% of high school students reported eating 5 or more servings of fruits and vegetables each day during the previous week.** (Michigan YRBS, 2007)
- **One in three Michigan high school students was in a physical fight one or more times in the past year.** (Michigan YRBS, 2007)
- **One in five pediatric emergency room visits is asthma related.** (Centers for Disease Control)
- **Every day, 4,000 kids try their first cigarette, and another 1,000 become new, regular, daily smokers.** (2006 National Survey on Drug Use and Health, 2007)

Impact of Quality Health Education

The Solution

Equip all students to be healthy and productive!

Health education teaches mental, social and emotional health; violence and bullying prevention; safety, including internet safety and child abuse prevention; nutrition and physical activity; alcohol, tobacco and other drug prevention; and disease prevention.

Economic Impact

- For an annual investment of \$10 per Michigan citizen for prevention programs, Michigan's net savings would be \$545,400,000 in five years, or a return on investment of 5.4 to one.
- Improving health status improves educational achievement, which increases economic success. (Martin, J. PhD, 2008)

Educational Impact

- The classroom that taught the communicable disease prevention lessons in the *Michigan Model for Health* and practiced hand-washing before lunch had the lowest absenteeism rate of the entire school. (Griffin Elementary, Grand Haven, 2002)
- The reading and math scores of third and fourth grade students who received comprehensive health education were significantly higher than those who did not receive health education. (Schoener et al., 1988)
- Teaching a student to be health literate produces a critical thinker and problem solver; a responsible, productive citizen; a self-directed learner; and an effective communicator. (Joint Committee on National Health Education Standards, 1995)
- An average student enrolled in a social and emotional learning program ranks at least 10 percentile points higher on achievements tests than students who do not participate in such programs, has better attendance and more constructive classroom behavior, likes school more, and has a better grade point average, and is less likely to be suspended or otherwise disciplined. (Shriver & Weissberg, Collaborative for Academic, Social, and Emotional Learning, 2005)
- Increased grade point average results when students attend schools with a coordinated school health program. (Hawkins et al., 1999)
- "Schools perform better when students have fewer health risks, such as drug use or poor nutrition, and more protective factors like caring relationships within schools."

(California Healthy Kids Survey, 2006)

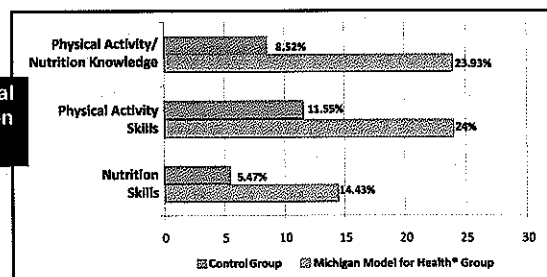


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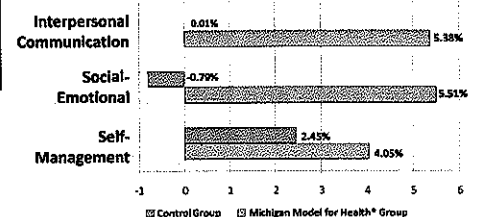
Public Health Impact

- Fourth grade students who received the *Michigan Model for Health* lessons had enhanced physical activity and nutrition skills, better social-emotional and self-management skills, improved safety attitudes, stronger drug and tobacco refusal skills, and less alcohol and tobacco use than those who didn't. (O'Neill, 2008)

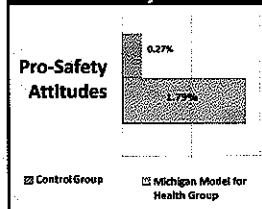
Enhanced Physical Activity & Nutrition Skills



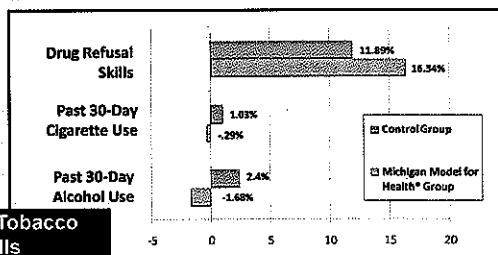
Better Social-Emotional & Self-Management Skills



Improved Pro-Safety Skills



Stronger Drug & Tobacco Refusal Skills



- Students who received the nutrition lessons from the middle school *Michigan Model for Health* were significantly more likely to eat fruits and vegetables and less likely to eat "junk food" than students in the control group. (Journal of School Health, 2008)
- Nearly 200,000 deaths a year could be prevented by eliminating education-associated excess mortality; only 30,000 could be prevented by medical advances. (Martin, J. PhD, 2008)
- Risk of stroke decreases by 11 percent for each additional portion of fruit and 3 percent for each additional portion of vegetables per day. (Dauchet, 2005)

Impact of Quality Physical Education

The Problem

Economic Impact

The estimated cost of physical inactivity in 2007 in Michigan was \$12.65 billion.

"If Michigan residents do not increase their physical activity levels, the Michigan economy will suffer increasingly heavy costs as aging adults endure premature and/or recurrent illnesses."

Source: The Economic Cost of Physical Inactivity in Michigan,
David Chenoweth, Ph.D., FAWHP

The financial impact of physical inactivity includes medical care, workers' compensation and lost productivity.

"The dollars spent on Medicaid for physical inactivity could fund a school nurse in every public middle and high school."

Source: The Economic Cost of Physical Inactivity in Michigan,
David Chenoweth, Ph.D., FAWHP

Educational Impact

Obese children miss four times as much school as normal-weight children.

"Obese children often suffer from depression, anxiety disorders, poor self-esteem, and bullying from their peers."

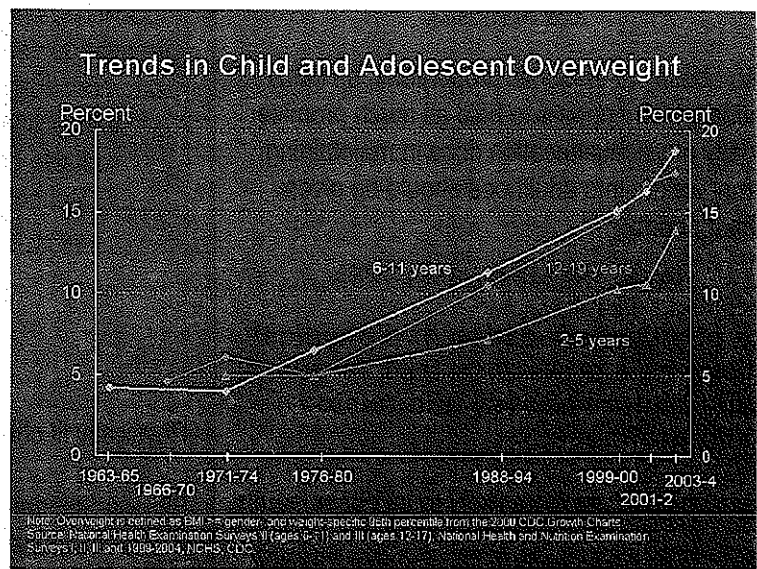
Source: State Education Standard,
National Association of State Boards of Education,
December 2004

Public Health Impact

If overweight and obesity trends continue, this generation of children will die younger than the prior generation.

"The U.S. could be facing its first sustained drop in life expectancy in the modern era, the researchers say, but this decline is not inevitable if Americans – particularly younger ones – trim their waistlines or if other improvements outweigh the impact of obesity."

Source: The National Institute on Aging, 2005



Seventeen percent of youth ages 6 to 17 are obese – a more than 300% increase since the 1970s.

"...the NHANES 2003-2004 overweight estimates suggest that since 1994, overweight in youths has not leveled off or decreased, and is increasing to even higher levels. The 2003-2004 findings for children and adolescents suggest the likelihood of another generation of overweight adults who may be at risk for subsequent overweight and obesity related health conditions."

Source: National Health and Nutrition Examination Survey, 2003-2004

"In 2005-2006, 34.3% of U. S. adults were obese."

Source: National Center for Health Statistics Data Brief, November 2007



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Impact of Quality Physical Education

The Solution

Increase time children spend in physical education class.

More time spent in physical education decreases obesity by 28%.

"In the aggregate population, each weekday that adolescents participated in PE decreased the odds of being an overweight adult by 5%. Furthermore, adolescents who participated in all 5 days of PE were 28% more likely to be normal-weight adults than their peers who did not."

Source: Archives of Pediatrics and Adolescent Medicine, 2008; 162(1):29-33.

"With obesity at epidemic proportions, an intervention which appears to hold as much promise as daily physical education does in maintaining normal weight into adulthood should be given highest priority."

Source: Reuters Health, January 7, 2008.

Use physical education and physical activity as a prevention tool, to guard against future obesity and related health problems.

Obese children are more likely to be obese adults.

"Efforts must begin early in life, because obesity in childhood, especially among older children and those with more-severe obesity, is likely to persist into adulthood. Therefore, childhood represents an important opportunity to establish healthy eating and activity behaviors that can protect children against future obesity."

Source: PEDIATRICS, Volume 120, Supplement 4, December 2007

"Obese children tend to be heavy in adulthood, in part because obesity-promoting habits persist."

Source: New England Journal of Medicine, Volume 357:2325-2327, December 6, 2007, Number 23

"Promoting fitness by increasing opportunities for physical activity during P.E., recess and out of school time may support academic achievement."

Source: Journal of School Health, American School Health Association, January 2009, Vol. 79, No. 1

Teach skills to children that will allow them to be physically active throughout life.

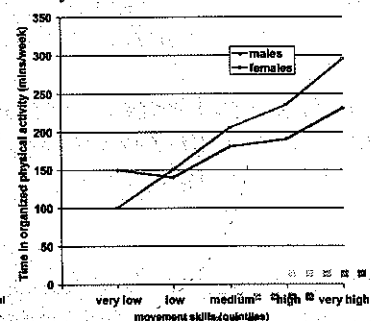


Michigan's Exemplary Physical Education Curriculum (EPEC) provides quality physical education to promote the teaching of knowledge, skills and attitudes that will enable children to be active for life.

Children who are more skilled are more likely to be active outside of school.

Relationship Between Fundamental Movement Skills and Organized Physical Activity

Fundamental movement skills are significantly associated with adolescents' participation in organized physical activity.



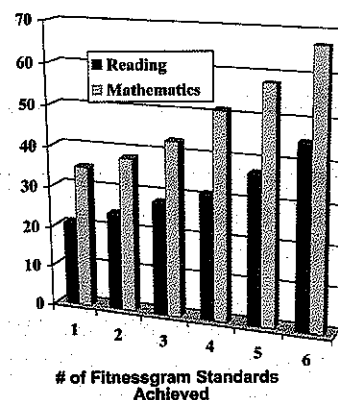
Orsillo, A., Booth, M., and Patterson, J. (2005). Relationship of physical activity to fundamental movement skills among adolescents. *Med. Sci. Sport Exerc.* 37(11), 1899-1904.

Physically fit children perform better academically.

Grade 9

Fitness Standards:

- ✓ Aerobic capacity
- ✓ Body composition
- ✓ Abdominal strength & endurance
- ✓ Trunk strength & flexibility
- ✓ Upper body strength & endurance
- ✓ Overall flexibility



Source: California Department of Education. Academic Achievement and Physical Fitness. California STAR Testing Program; 2002

"Increased physical activity increases blood flow to the brain and encourages growth and development of new cells in areas of the brain responsible for planning, reasoning and some types of learning."

Source: Pereira, 2007; van Praag, 2005